Nova Scotia Department of Agriculture and Marketing

RP-85-700
Agdex 821.410 03

Dairy Farm Business Summary

1984

1 9 8 4

NOVA SCOTIA DAIRY FARM

BUSINESS SUMMARY REPORT

PREPARED BY: ROLLIE L. HAYMAN
SUPERVISOR, FARM MANAGEMENT

AND

DEBBIE FREEMAN
TECHNICIAN, FARM MANAGEMENT

EXTENSION SERVICES BRANCH

NOVA SCOTIA DEPARTMENT OF AGRICULTURE AND MARKETING

PREFACE

The 1984 Nova Scotia Dairy Farm Business Summary is a synopsis of the business performance of one hundred and forty-five (145) Nova Scotia Dairy Farms. The majority of these farms participated in the CanFarm Records Program in 1984.

The farms used in this summary were not selected on a random sample basis. Instead, farmers volunteered to have their data included in the summary. Hence, care should be exercised in the use and interpretation of the results shown in the various tables of this publication.

Despite this limitation, this publication can be used by farmers to compare their individual results with group average figures for farms with similar characteristics. Such comparison can provide the farm manager with useful information that can be used in management decisions. However, the best information is the farmers own records and comparison of these from year to year.

We gratefully acknowledge the co-operation of the one hundred and forty-five (145) dairy producers who participated in this summary. Without their co-operation and data, no summary would be possible.

We further acknowledge the efforts of Debbie Freeman, Farm Management Technician who prepared the data for this summary; Shelley Manning, Farm Management Technician who collected part of the data; Fred Works, who prepared the Computer Program used in the analysis and Tracey Mitchell for the secretarial work in preparing the summary.

Rollie L. Hayman, P.Ag.
Supervisor, Farm Management

JUNE 1984

TABLE OF CONTENTS

	PAGE
SECTION A - INTRODUCTION	1
SECTION B - UNIT SIZE - 20-39 COWS	6
SECTION C - UNIT SIZE - 40-59 COWS	16
SECTION D - UNIT SIZE - 60-99 COWS	26
SECTION E - UNIT SIZE - 100+ COWS	36
SECTION F - ANALYSIS OF ALL FARMS	46
SECTION G - NET FARM INCOME ANALYSIS	56
SECTION H - PRODUCTION ANALYSIS	61
SECTION I - INVESTMENT ANALYSIS	66
SECTION J - SUMMARY	71
APPENDIX	74

INDEX OF FIGURES

FIGURE A-1:	DISTRIBUTION OF 145 DAIRY FARMS BY REGION WITHIN NOVA SCOTIA	2
FIGURE A-2:	DISTRIBUTION OF 145 DAIRY FARMS BY GROSS FARM INCOME	3

Section A

Introduction

INTRODUCTION

The Nova Scotia Dairy Farm Business Summary is designed to provide bench-mark information that can be used to compare the financial strength and weakness of individual dairy farms with similar characteristics. Farm Business Analysis is an important function of the farm manager-operator. When analysing the farm business, you must ask meaningful questions regarding the costs, incomes, efficiencies and capital investment found in your business. This summary is designed to assist you with those questions and to provide you with basic information for comparison purposes. By identifying the strengths of your business and building on these, you should be able to enhance the profit picture of your farm business. By identifying the weaknesses of your business and taking corrective action, the profit picture should also be improved.

Standards of performance and business progress are matters of personal choice and family goal setting. Each farm situation will have a different set of goals or objectives - a different set of values that you feel must be met through the farm business. It is for each of you to identify these and then compare your performance in achieving these objectives.

There are several ways that you can compare your farm performance. These include:

- You can compare your performance this year to that of last year. This perhaps is the best comparison. Have you progressed in reaching the goals you have set for your farm business.

- You can compare your performance with group average data for farms of similar size and general characteristics. This report may be useful in this regard.

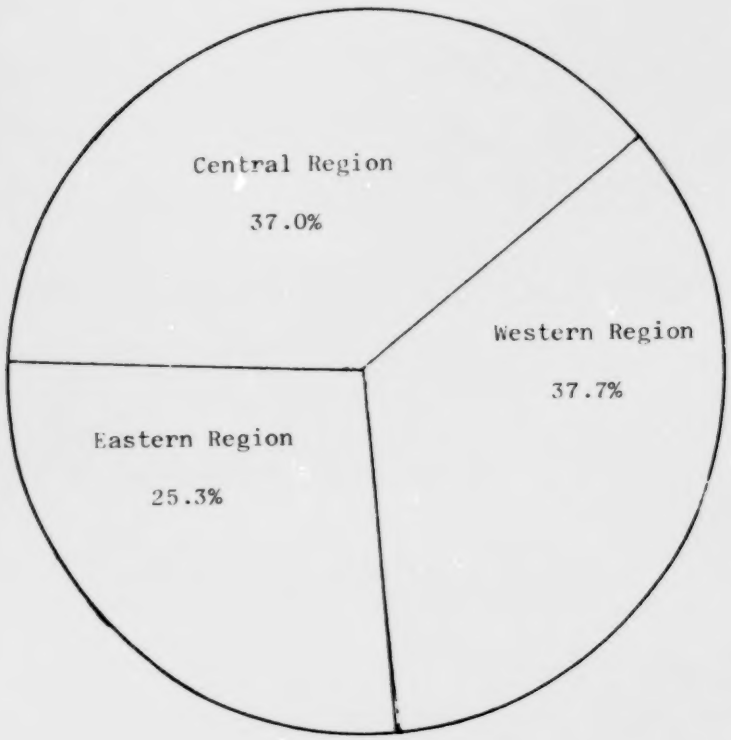
- You can compare your performance to that found by research - realizing that the research data was obtained under a special set of conditions.

In 1984, there were a total of 615 fluid milk producers in Nova Scotia. Basic data for this summary was prepared from 145 of these farms located throughout Nova Scotia. These 145 farms represent 23.6 percent of the total number of fluid milk farms in the province.

In terms of production, the farms included in the summary produced 52,616,730 litres of milk for sale. The total milk produced by fluid milk farms in the province was 171,814,000 litres. Hence, in terms of production, farms included in this summary produced 30.6 percent of the milk produced by fluid milk farms in Nova Scotia.

Figure A-1 provides information on the distribution of these one hundred and forty-five (145) farms relative to their location in the province. A description of the counties contained in each region can be found following Figure A-1.

FIGURE A-1: DISTRIBUTION OF 145 DAIRY FARMS BY REGION WITHIN NOVA SCOTIA



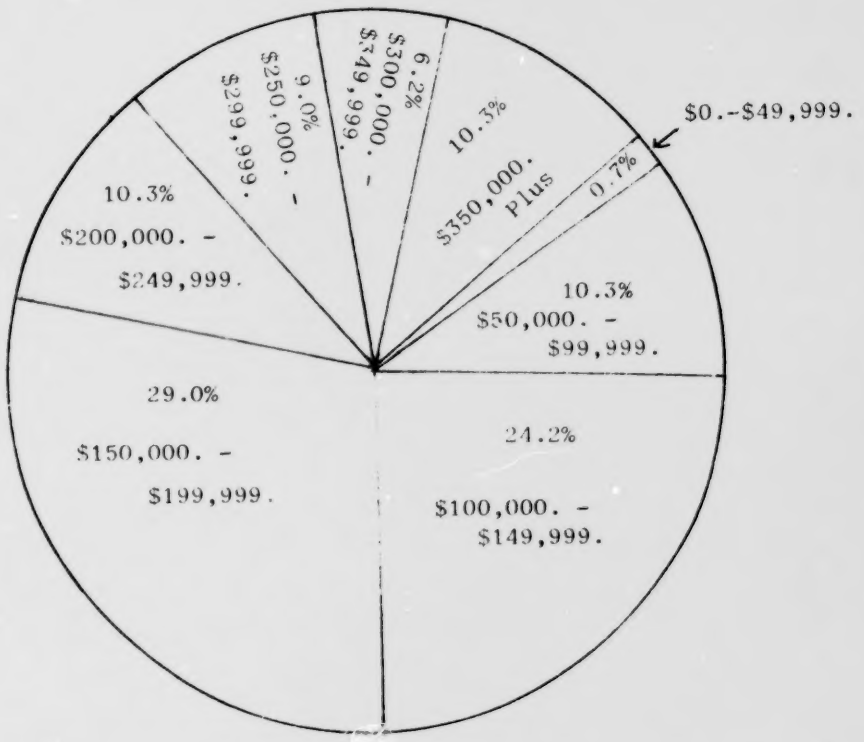
Central Region: Represents dairy farms from Colchester, Cumberland, East Hants, Halifax and Pictou Counties.

Eastern Region: Represents dairy farms from Antigonish, Cape Breton, Inverness and Victoria Counties.

Western Region: Represents dairy farms from Annapolis, Kings, Lunenburg, West Hants and Yarmouth Counties.

Figure A-2 provides information on the distribution of these one hundred and forty-five (145) dairy farms relative to the size of business measured in terms of Gross Farm Income.

FIGURE A-2: DISTRIBUTION OF 145 DAIRY FARMS BY GROSS FARM INCOME



The one hundred and forty-five (145) dairy farms in the summary were classified into four (4) groups according to herd size. These groups were (1) 20-39 Cows; (2) 40-59 Cows; (3) 60-99 Cows; and (4) 100 Plus Cows. The basic format for the presentation of information in this summary is as follows for Sections "B" through "F".

1. Receipts
2. Expenses
3. Income Summary
4. Net Cost of Production
5. Production Analysis
6. Balance Sheet
7. Balance Sheet Analysis
8. Labor Analysis
9. Analysis of Expenses
10. Receipts and Expenses Summary

Sections "G" through "I" provide additional information on the one hundred and forty-five (145) dairy farms by reclassifying these farms on the basis of Net Farm Income, Production and Investment Levels per cow.

Section "J" provides a summary of various production and management factors found throughout this summary.

The Appendix contains comparison figures for the total group based on a per farm, per cow, per hectolitre, per hundredweight and percentage analysis basis. In addition, a Glossary of Terms used in the summary is provided.

Throughout the analysis, several assumptions were made and used that should be noted. These include:

(a) Tax depreciation was used in place of management depreciation. This may result in slightly "higher than normal" depreciation figure in this summary.

(b) Operator labor value must be considered minimal. The value chosen was the 1983 figure plus 5 percent in all size groups.

(c) Investment figures used were farmers book values. These may or may not represent cost. They may or may not represent market value. Rather, some mixture of the two concepts may be more representative in many instances.

(d) Interest on Equity was calculated using a 10 percent interest rate.

Given the above explanatory notes, the basic data was then prepared. Throughout the summary, per farm and per cow figures are presented.

Section B

Unit Size

20·39 cows

RECEIPTS

For farms in this group, Sales of Milk and Milk Subsidy accounted for 82 percent of Total Farm Receipts. Of this total, Fluid Milk amounted to 70.5 percent, while Manufactured Milk was 25.3 percent and Milk Subsidy was 4.2 percent.

Livestock Sales accounted for 6.2 percent, Crop Sales 1.0 percent, and Miscellaneous Sales 10.4 percent of Total Farm Receipts. Total Farm Receipts were $105,689. per farm or $3,209. on a per cow basis.

TABLE B-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$ 61,403.	$ 1,864.
Manufactured Milk Sales	21,995.	668.
Milk Subsidies	3,681.	112.
Livestock Sales	6,579.	200.
Crop Sales	1,063.	32.
Miscellaneous Sales	10,968.	333.
TOTAL FARM RECEIPTS	$105,689.	$ 3,209.

EXPENSES

Total Cash Expenses for farms in this group were $86,470. per farm, and $2,626. on a per cow basis.

The largest single expense item was purchased dairy feed, amounting to $793. per cow or 30.2 percent of Cash Expenses. Feed was followed by Interest at 11.8 percent, Crop Expenses at 7.0 percent, Hired Labor at 7.0 percent, and Tractor and Machinery Expense at 6.7 percent of Cash Expenses as major expense items.

TABLE B-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 3,212.	$ 98.
Dairy Feed	26,106.	793.
Livestock Purchased	2,229.	68.
Vet & Drugs	1,030.	31.
Breeding	1,146.	35.
Dairy Supplies	2,398.	73.
Milk Marketing	5,268.	160.
Crop Expenses	6,104.	185.
Building & Fence Repairs	2,340.	71.
Utilities	3,834.	116.
Tractor & Machinery Expense	5,788.	176.
Truck & Auto Expense	2,613.	79.
Interest	10,230.	311.
Hired Labor	6,056.	184.
Taxes	1,068.	32.
Insurance	1,751.	53.
Miscellaneous	5,297.	161.
TOTAL CASH EXPENSES	$ 86,470.	$ 2,626.

INCOME SUMMARY

There are a number of measures of income that are used in the analysis of a farm business. Each measure has important uses and three (3) of these measures are outlined below.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For this group of farms, Net Cash Income was $19,219. per farm, or $583. on a per cow basis.

NET FARM INCOME further refines Net Cash Income by making two adjustments to this figure. The two adjustments are Inventory Change and Depreciation. The Net Farm Income - the return to the Operator for his labor, management and capital for this group was $7,592. per farm or $231. per cow.

LABOR AND MANAGEMENT INCOME further refines Net Farm Income by adjusting this figure for a return to Equity Capital. The result is a return to the Operator for his Labor and Management Skills. For farms in this group, Labor and Management Income was $783. per farm, or $24. per cow.

TABLE B-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$105,689.	$3,209.
Total Cash Expenses	86,470.	2,626.
NET CASH INCOME	$ 19,219.	$ 583.
Plus: Inventory Change	$ 1,077.	$ 33.
Less: Depreciation	12,705.	386.
NET FARM INCOME	$ 7,592.	$ 231.
Less: Value of Unpaid Family Labor	$ 189.	$ 6.
Interest on Equity @ 10%	6,620.	201.
LABOR AND MANAGEMENT INCOME	$ 783.	$ 24.

NET COST OF PRODUCTION

Farms in this group did not receive a return to all factors of production at the assumed levels. Total Cost of Producing Milk averaged $53.26 per hectolitre, while the return averaged $48.05.

Note that all costs have been charged - including a value for operator labor. If this charge was deducted, the return over costs would be $0.43 per hectolitre, or $779. per farm, and this amount would represent the return to the Operator for his Labor and Management Skills.

TABLE B-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$ 86,470.	$ 2,626.
Plus: Depreciation		12,705.	386.
Inventory Change		-(1,077.)	-(33.)
Interest on Equity @ 10%		6,620.	201.
Value of Unpaid Family Labor		189.	6.
Operator Labor		10,215.	310.
Less: Sales (Excl. Milk)		18,610.	565.
NET COST OF PRODUCING MILK		$ 96,512.	$ 2,931.
Number of Cows	(#)	33	1
Total Litres of Milk Sold	(L)	181,214	5,502
Price Received per HL	($)	48.05	48.05
Cost of Producing Milk per HL	($)	53.26	53.26
NET RETURN PER HL	($)	$ -(5.21)	$-(5.21)

PRODUCTION ANALYSIS

For the 20-39 cow group, the average number of cows per farm was 33, with production of 5,502 litres per cow. The average price received per hectolitre for milk was $48.05.

Purchased dairy feed was the largest expense item accounting for 26.3 percent of total costs, or 30.0 percent of milk sales. On a per cow basis. each cow equivalent consumed 2,807 kilograms of feed at a cost of $793.00. On a per farm basis, each farm purchased 92,631 kilograms of feed at a cost of $26,106.00.

TABLE B-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	33	1
Total Litres of Milk Sold	(L)	181,214	5,502
Value of Milk Sold	($)	87,079	2,644
Price Received per HL Milk	($)	48.05	48.05
Fluid Milk (L's as % of Total Milk)	(%)	67.5	67.5
Fluid Milk ($'s as % of Total Milk)	(%)	70.5	70.5
Cost of Dairy Feed	($)	26,106	793
Feed Cost per HL Milk Sold	($)	14.41	14.41
Feed Cost as % of Total Cost	(%)	26.3	26.3
Feed Cost as % of Milk Sales	(%)	30.0	30.0
Kilograms of Feed/HL Milk	(kgs)	51.0	51.0
Kilograms of Feed	(kgs)	92,631	2,807
Pounds of Feed	(lbs)	203,775	6,175

BALANCE SHEET

The Balance Sheet provides a measure of the financial health of the business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS are all items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities, and represents the owners contributions to the capital of the business.

For farms in this group, Total Assets averaged $194,253. or $5,898. on a per cow basis. Liabilities averaged $128,054. per farm or $3,888. on a per cow basis, leaving Equity or Net Worth at $66,199. per farm, or $2,010. on a per cow basis.

TABLE B-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 38,452.	$ 1,168.
" " - Buildings	49,790.	1,512.
" " - Machinery	32,579.	989.
" " - Livestock	38,188.	1,160.
" " - Crops & Supplies	7,696.	234.
" " - Milk Quota	14,196.	431.
" " - Acct's Receivable	13,353.	406.
TOTAL INVENTORY VALUE - ASSETS	$194,253.	$ 5,898.
LIABILITIES:		
Short Term	$ 8,816.	$ 268.
Intermediate Term	12,633.	384.
Long Term	106,605.	3,237.
TOTAL LIABILITIES	$128,054.	$ 3,888.
EQUITY OR NET WORTH	$ 66,199.	$ 2,010.

BALANCE SHEET ANALYSIS

Farms in this cow group averaged 34.1 percent Equity, on which they received no return to that Equity. Return to Total Capital Investment averaged 3.85 percent.

Capital Turnover was accomplished in 1.80 years.

Current ratio was $6.72 - for each dollar in current debt on these farms, there was $6.72 in current assets to cover these liabilities.

The ratio of Total Assets to Total Liabilities was 1.52, while Debt to Equity ratio averaged 1.93.

Net Farm Income as a percent of Gross Farm Income averaged 7.11 percent for these farms.

TABLE B-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	34.1
Return on Equity	(%)	-0-
Return on Invested Capital	(%)	3.85
Capital Turnover	(Yrs)	1.80
Current Assets/Current Liabilities	($)	6.72
Total Assets/Total Liabilities	($)	1.52
Total Liabilities/Equity	($)	1.93
Net Income/Gross Income	(%)	7.11

LABOR ANALYSIS

This size group of farms averaged 33 cows per farm, or 20 cows per man equivalent. In terms of labor, there were 1.07 operator and unpaid family man equivalents per farm and 0.55 hired man equivalents.

Milk sold per man equivalent averaged 112,141 litres. Labor income per man equivalent (operator and unpaid family labor) averaged $911. for this group of farms.

TABLE B-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	33
Operator & Family Man Equivalents	(#)	1.07
Hired Man Equivalents	(#)	0.55
Total Man Equivalents	(#)	1.62
Cows per Man Equivalent	(#)	20
Milk Sold per Man Equivalent	(L)	112,141
Milk Sold per Man Equivalent	($)	53,752
Labor Income per Man Equivalent Operator & Unpaid Family	($)	911

ANALYSIS OF EXPENSES

For farms in this group, purchased dairy feed was the largest single expense item, accounting for 26.3 percent of Total Costs. Feed was followed by Depreciation at 12.8 percent, Interest at 10.3 percent, Crop Expenses at 6.2 percent, Hired Labor at 6.1 percent and Tractor & Machinery Expense at 5.8 percent.

TABLE B-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 98.	3.2
Dairy Feed	793.	26.3
Livestock Purchased	68.	2.3
Vet & Drugs	31.	1.0
Breeding	35.	1.2
Dairy Supplies	73.	2.4
Milk Marketing	160.	5.3
Crop Expenses	185.	6.2
Building & Fence Repairs	71.	2.4
Utilities	116.	3.9
Tractor & Machinery Expenses	176.	5.8
Truck & Auto Expenses	79.	2.6
Interest	311.	10.3
Hired Labor	184.	6.1
Taxes	32.	1.1
Insurance	53.	1.8
Miscellaneous	161.	5.3
Depreciation	386.	12.8
TOTAL EXPENSES	$3,011.	100.0 %

RECEIPTS AND EXPENSES SUMMARY

Figures presented in this table represent receipts and expenses for this size group of farms on a per cow, per hectolitre and a per hundredweight of milk sold basis.

TABLE B-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER 100 LITRES	PER CWT.
RECEIPTS:			
Fluid Milk	$1,864.	$ 33.88	$ 14.93
Manufactured Milk	668.	12.14	5.35
Milk Subsidies	112.	2.03	.89
Livestock Sales	200.	3.63	1.60
Crop Sales	32.	.59	.26
Miscellaneous Sales	333.	6.05	2.67
TOTAL CASH RECEIPTS	$3,209.	$ 58.32	$ 25.69
Adj. for Inventory Change	$ 33.	$ .59	$ .26
TOTAL FARM RECEIPTS	$3,242.	$ 58.92	$ 25.95
EXPENSES:			
Milk Hauling	$ 98.	$ 1.77	$ .78
Dairy Feed	793.	14.41	6.35
Livestock Purchases	68.	1.23	.54
Vet & Drugs	31.	.57	.25
Breeding	35.	.63	.28
Dairy Supplies	73.	1.32	.58
Milk Marketing	160.	2.91	1.28
Crop Expenses	185.	3.37	1.48
Building & Fence Repair	71.	1.29	.57
Utilities	116.	2.12	.93
Tractor & Machinery Repair	176.	3.19	1.41
Truck & Auto Expense	79.	1.44	.64
Interest	311.	5.65	2.49
Hired Labor	184.	3.34	1.47
Taxes	32.	.59	.26
Insurance	53.	.97	.43
Miscellaneous	161.	2.92	1.29
TOTAL CASH EXPENSES	$2,626.	$ 47.72	$ 21.02
Building Depreciation	$ 109.	$ 1.99	$ .88
Machinery Depreciation	276.	5.02	2.21
TOTAL DEPRECIATION	$ 386.	$ 7.01	$ 3.09
TOTAL FARM EXPENSES	$3,011.	$ 54.73	$ 24.11
NET FARM INCOME	$ 231.	$ 4.19	$ 1.85

Section C

Unit Size

40·59 cows

RECEIPTS

Farms in this size range had receipts from milk and milk subsidy of $130,058. or $2,647. on a per cow basis. This amount accounted for 84.4 percent of Total Farm Receipts. Of this amount, fluid milk represented 69.5 percent, manufactured milk 26.3 percent and milk subsidy 4.3 percent.

Livestock sales averaged 7.3 percent of Total Farm Receipts, while Crop Sales were 1.2 percent and Miscellaneous Sales were 7.0 percent.

Total Farm Receipts averaged $154,041. per farm or $3,135. on a per cow basis.

TABLE C-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$ 90,344.	$ 1,839.
Manufactured Milk Sales	34,142.	695.
Milk Subsidy	5,572.	113.
Livestock Sales	11,286.	230.
Crop Sales	1,888.	38.
Miscellaneous Sales	10,808.	220.
TOTAL FARM RECEIPTS	$154,041.	$ 3,135.

EXPENSES

Total Cash Expenses for farms in this group averaged $123,749. per farm or $2,518. per cow. Purchased dairy feed was the largest expense item and accounted for 31.2 percent of this total.

Feed was followed by interest at 10.8 percent, hired labor at 8.9 percent, crop expenses at 7.1 percent, and miscellaneous at 6.4 percent.

TABLE C-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 4,623.	$ 94.
Dairy Feed	38,583.	785.
Livestock Purchases	4,574.	93.
Vet & Drugs	1,620.	33.
Breeding	1,968.	40.
Dairy Supplies	3,590.	73.
Milk Marketing	7,216.	147.
Crop Expenses	8,845.	180.
Building & Fence Repair	3,026.	62.
Utilities	4,187.	85.
Tractor & Machinery Expense	7,524.	153.
Truck & Auto Expense	2,609.	53.
Interest	13,415.	273.
Hired Labor	10,941.	223.
Taxes	1,006.	20.
Insurance	2,094.	43.
Miscellaneous	7,926.	161.
TOTAL CASH EXPENSES	$123,749.	$ 2,518.

INCOME SUMMARY

When analyzing a farm business, a number of different measures of income are often used to assess the financial strength of the business. Three (3) of these measures are:

NET CASH INCOME is the difference between Total Farm Receipts and Total Cash Expenses. For this group of farms, Net Cash Income was $30,292. per farm or $617. per cow.

NET FARM INCOME adjusts Net Cash Income for Inventory Change and Depreciation. Net Farm Income represents the return to the operator for his labor, management and capital. For this group, Net Farm Income was $15,419. per farm or $314. on a per cow basis.

LABOR AND MANAGEMENT INCOME represents the amount of income left for the operator for his labor and management skills. For this group, Labor and Management Income was $5,425. per farm or $110. per cow.

TABLE C-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$154,041.	$ 3,135.
Total Cash Expenses	123,749.	2,518.
NET CASH INCOME	$ 30,292.	$ 617.
Plus: Inventory Change	$ 1,198.	$ 24.
Less: Depreciation	16,071.	327.
NET FARM INCOME	$ 15,419.	$ 314.
Less: Value of Unpaid Family Labor	$ 620.	$ 13.
Interest on Equity @ 10%	9,374.	191.
LABOR AND MANAGEMENT INCOME	$ 5,425.	$ 110.

NET COST OF PRODUCTION

Farms in this group did not receive a return to all factors of production at the assumed levels from the sale of milk in 1984. On a farm basis, Net Cost of Producing Milk was $138,453.00. On a per hectolitre of milk sold basis, this cost was $50.42, leaving a Net Return of $-(3.06).

All costs, including a value for Operator Labor have been included. If Operator Labor was excluded, the cost would have been $45.39, leaving a Net Return of $1.97. This then would be the return to the operator for his labor.

TABLE C-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$123,749.	$ 2,518.
Plus: Depreciation		16,071.	327.
Inventory Change		-(1,198.)	-(24.)
Interest on Equity @ 10%		9,374.	191.
Value of Unpaid Family Labor		620.	13.
Operator Labor		13,820.	281.
Less: Sales (Excl. Milk)		23,983.	488.
NET COST OF PRODUCING MILK		$138,453.	$ 2,818.
Number of Cows	(#)	49	1
Total Litres of Milk Sold	(L)	274,606	5,589
Price Received per HL	($)	47.36	47.36
Cost of Producing Milk HL	($)	50.42	50.42
NET RETURN PER HL	($)	$ -(3.06)	$-(3.06)

PRODUCTION ANALYSIS

Total milk sales averaged 274,606 litres per farm. For farms in this group, 49 cows per farm was the average with milk sold per cow standing at 5,539 litres.

Fluid milk represented 65.9 percent of the volume of milk sold, while in dollar terms, fluid milk accounted for 69.5 percent of milk sales. Average blend price for all milk was 47.36 per hectolitre.

Purchased feed averaged $785. per cow or $14.05 per hectolitre of milk sold. These dollars represented 2,807 kilograms of feed per cow consumed.

TABLE C-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	49	1
Total Litres of Milk Sold	(L)	274,606	5,539
Value of Milk Sold	($)	130,058	2,647
Price Received per HL Milk	($)	47.36	47.36
Fluid Milk (L's as % of Total Milk)	(%)	65.9	65.9
Fluid Milk ($'s as % of Total Milk)	(%)	69.5	69.5
Cost of Dairy Feed	($)	38,583	785
Feed Cost per HL Milk Sold	($)	14.05	14.05
Feed Cost as % of Total Cost	(%)	27.6	27.6
Feed Cost as % of Milk Sales	(%)	29.7	29.7
Kilograms of Feed/HL Milk	(kgs)	50.2	50.2
Kilograms of Feed	(kgs)	137,543	2,807
Pounds of Feed	(Lbs)	302,575	6,175

BALANCE SHEET

The Balance Sheet represents a picture of the financial position of a business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between assets and liabilities and represents the owners capital investment in the business.

For this group of farms, assets amounted to $247,204. per farm or $5,031. per cow. Liabilities averaged $153,462. per farm and $3,123. on a per cow basis. Equity or Net Worth - the difference between assets and Liabilities was $93,742. per farm or $1,908. per cow.

TABLE C-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 44,639.	$ 908.
" " - Buildings	46,988.	956.
" " - Machinery	42,199.	859.
" " - Livestock	68,435.	1,393.
" " - Crops & Supplies	9,677.	197.
" " - Milk Quota	19,153.	390.
" " - Acct's Receivable	15,070.	307.
" " - Other	1,041.	21.
TOTAL INVENTORY VALUE - ASSETS	$247,204.	$ 5,031.
LIABILITIES:		
Short Term	$ 13,618.	$ 277.
Intermediate Term	20,973.	427.
Long Term	118,871.	2,419.
TOTAL LIABILITIES	$153,462	$ 3,123.
EQUITY OR NET WORTH	$ 93,742.	$ 1,908.

PRODUCTION ANALYSIS

Total milk sales averaged 274,606 litres per farm. For farms in this group, 49 cows per farm was the average with milk sold per cow standing at 5,539 litres.

Fluid milk represented 65.9 percent of the volume of milk sold, while in dollar terms, fluid milk accounted for 69.5 percent of milk sales. Average blend price for all milk was 47.36 per hectolitre.

Purchased feed averaged $785. per cow or $14.05 per hectolitre of milk sold. These dollars represented 2,807 kilograms of feed per cow consumed.

TABLE C-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	49	1
Total Litres of Milk Sold	(L)	274,606	5,539
Value of Milk Sold	($)	130,058	2,647
Price Received per HL Milk	($)	47.36	47.36
Fluid Milk (L's as % of Total Milk)	(%)	65.9	65.9
Fluid Milk ($'s as % of Total Milk)	(%)	69.5	69.5
Cost of Dairy Feed	($)	38,583	785
Feed Cost per HL Milk Sold	($)	14.05	14.05
Feed Cost as % of Total Cost	(%)	27.6	27.6
Feed Cost as % of Milk Sales	(%)	29.7	29.7
Kilograms of Feed/HL Milk	(Kgs)	50.2	50.2
Kilograms of Feed	(Kgs)	137,543	2,807
Pounds of Feed	(Lbs)	302,575	6,175

BALANCE SHEET

The Balance Sheet represents a picture of the financial position of a business at a particular point in time. The Balance Sheet is composed of three (3) main parts, namely:

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between assets and liabilities and represents the owners capital investment in the business.

For this group of farms, assets amounted to $247,204. per farm or $5,031. per cow. Liabilities averaged $153,462. per farm and $3,123. on a per cow basis. Equity or Net Worth - the difference between assets and Liabilities was $93,742. per farm or $1,908. per cow.

TABLE C-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 44,639.	$ 908.
" " - Buildings	46,988.	956.
" " - Machinery	42,199.	859.
" " - Livestock	68,435.	1,393.
" " - Crops & Supplies	9,677.	197.
" " - Milk Quota	19,153.	390.
" " - Acct's Receivable	15,070.	307.
" " - Other	1,041.	21.
TOTAL INVENTORY VALUE - ASSETS	$247,204.	$ 5,031.
LIABILITIES:		
Short Term	$ 13,618.	$ 277.
Intermediate Term	20,973.	427.
Long Term	118,871.	2,419.
TOTAL LIABILITIES	$153,462.	$ 3,123.
EQUITY OR NET WORTH	$ 93,742.	$ 1,908.

BALANCE SHEET ANALYSIS

For farms in this size group, equity in the farm business averaged 3.79 percent. Farms received a return to equity capital of 1.05 percent and a return to total capital of 5.85 percent.

Capital Turnover averaged 1.59 years.

Total Assets to Total Liabilities ratio was $1.61 - for every dollar of debt there were $1.61 of assets.

Net Income as a percent of Gross Farm Income averaged 9.93 percent for this group of farms.

TABLE C-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	37.9
Return on Equity	(%)	1.05
Return on Invested Capital	(%)	5.85
Capital Turnover	(Yrs)	1.59
Current Assets/Current Liabilities	($)	6.92
Total Assets/Total Liabilities	($)	1.61
Total Liabilities/Equity	($)	1.64
Net Income/Gross Income	(%)	9.93

LABOR ANALYSIS

The labor complement on farms in this size range averaged 2.26 man equivalents; composed of 1.27 operator and unpaid family labor and 0.99 hired man equivalents.

For each man equivalent, 22 cows were maintained with 121,578 litres of milk sold at a value of $57,548.00.

Labor Income per man equivalent averaged $4,774.00.

TABLE C-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	49
Operator & Family Man Equivalents	(#)	1.27
Hired Man Equivalents	(#)	0.99
Total Man Equivalents	(#)	2.26
Cows per Man Equivalent	(#)	22
Milk Sold per Man Equivalent	(L)	121,578
Milk Sold per Man Equivalent	($)	57,548
Labor Income per Man Equivalent		
Operator & Unpaid Family	($)	4,774

ANALYSIS OF EXPENSES

Purchased Dairy Feed was the largest expense item and accounted for 27.6 percent of Total Expenses. Feed was followed by depreciation at 11.5 percent, interest at 9.6 percent, hired labor at 7.8 percent, crop expenses at 6.3 percent, and miscellaneous at 5.7 percent of Total Expenses.

TABLE C-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 94.	3.3 %
Dairy Feed	785.	27.6
Livestock Purchased	93.	3.3
Vet & Drugs	33.	1.1
Breeding	40.	1.4
Dairy Supplies	73.	2.6
Milk Marketing	147.	5.2
Crop Expenses	180.	6.3
Building & Fence Repairs	62.	2.1
Utilities	85.	3.0
Tractor & Machinery Expenses	153.	5.4
Truck & Auto Expenses	53.	1.9
Interest	273.	9.6
Hired Labor	223.	7.8
Taxes	20.	0.7
Insurance	43.	1.5
Miscellaneous	161.	5.7
Depreciation	327.	11.5
TOTAL EXPENSES	$ 2,845.	100.0 %

RECEIPTS AND EXPENSES SUMMARY

Information supplied in this section summarizes receipts and expenses for this group of farms on a per cow, per hectolitre and a per hundredweight milk sold basis.

TABLE C-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER 100 LITRES	PER CWT.
RECEIPTS:			
Fluid Milk	$1,839.	$ 32.90	$ 14.49
Manufactured Milk	695.	12.43	5.48
Milk Subsidies	113.	2.03	0.89
Livestock Sales	230.	4.11	1.81
Crop Sales	38.	0.69	0.30
Miscellaneous Sales	220.	3.94	1.73
TOTAL CASH RECEIPTS	$3,135.	$ 56.10	$ 24.71
Adj. for Inventory Change	$ 24.	$ 0.44	$ 0.19
TOTAL FARM RECEIPTS	$3,159.	$ 56.53	$ 24.90
EXPENSES:			
Milk Hauling	$ 94.	$ 1.68	$ 0.74
Dairy Feed	785.	14.05	6.19
Livestock Purchases	93.	1.67	0.73
Vet & Drugs	33.	0.59	0.26
Breeding	40.	0.72	0.32
Dairy Supplies	73.	1.31	0.58
Milk Marketing	147.	2.63	1.16
Crop Expenses	180.	3.22	1.42
Building & Fence Repair	62.	1.10	0.49
Utilities	85.	1.52	0.67
Tractor & Machinery Repair	153.	2.74	1.21
Truck & Auto Expense	53.	0.95	0.42
Interest	273.	4.89	2.15
Hired Labor	223.	3.98	1.76
Taxes	20.	0.37	0.16
Insurance	43.	0.76	0.34
Miscellaneous	161.	2.89	1.27
TOTAL CASH EXPENSES	$2,518.	$ 45.06	$ 19.85
Building Depreciation	$ 90.	$ 1.61	$ 0.71
Machinery Depreciation	237.	4.24	1.87
TOTAL DEPRECIATION	$ 327.	$ 5.85	$ 2.58
TOTAL FARM EXPENSES	$2,845.	$ 50.92	$ 22.43
NET FARM INCOME	$ 314.	$ 5.62	$ 2.47

Section D

Unit Size

60·99 cows

RECEIPTS

Receipts from the sale of milk and milk subsidy accounted for 84.7 percent of Total Farm Receipts. Of this amount, fluid milk averaged 72.3 percent, manufactured milk 24.0 percent and milk subsidy 3.7 percent.

Livestock sales accounted for 7.4 percent, crop sales 1.5 percent and miscellaneous sales 6.3 percent of Total Farm Receipts.

Total Farm Receipts averaged $228,529. per farm, and $3,187. on a per cow basis.

TABLE D-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$140,093.	$ 1,954.
Manufactured Milk Sales	46,457.	648.
Milk Subsidy	7,105.	99.
Livestock Sales	16,970.	237.
Crop Sales	3,401.	47.
Miscellaneous Sales	14,504.	202.
TOTAL CASH RECEIPTS	$228,529.	$ 3,187.

EXPENSES

Purchased dairy feed was the largest single expense item. Purchased feed amounted to $54,837. per farm or $765. per cow. This amount was 29.2 percent of the Total Cash Expenses of $187,981. per farm, or $2,622. per cow.

Feed was followed by interest at 11.3 percent, hired labor at 11.1 percent, crop expenses at 7.2 percent, and miscellaneous at 7.1 percent of Total Cash Expenses.

TABLE D-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 6,847.	$ 95.
Dairy Feed	54,837.	765.
Livestock Purchases	6,132.	86.
Vet & Drugs	2,369.	33.
Breeding	2,375.	33.
Dairy Supplies	4,464.	62.
Milk Marketing	11,089.	155.
Crop Expenses	13,475.	188.
Building & Fence Repair	4,280.	60.
Utilities	5,065.	71.
Tractor & Machinery Repair	13,614.	190.
Truck & Auto Expense	3,254.	45.
Interest	20,890.	291.
Hired Labor	21,362.	298.
Taxes	1,418.	20.
Insurance	3,175.	44.
Miscellaneous	13,337.	186.
TOTAL CASH EXPENSES	$187,981.	$ 2,622.

INCOME SUMMARY

The analysis of income is one of the important aspects of Farm Business Analysis. There are a number of different measures of income that are often used for Income Analysis.

NET CASH INCOME is the difference between Farm Receipts and Cash Expenses. For this group of farms, Net Cash Income was $40,548. per farm or $565. per cow.

NET FARM INCOME adjusts Net Cash Income for Inventory Change and Depreciation. Net Farm Income represents the return to the operator for his labor, management and capital. The average Net Farm Income for these farms was $20,549. per farm or $287. on a per cow basis.

LABOR AND MANAGEMENT INCOME further refines income by deducting a value for Unpaid Family Labor and Interest on Equity, and represents the return to the operator for his labor and management skills. For the group, Labor and Management Income was $7,048. per farm.

TABLE D-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$228,529.	$ 3,187.
Total Cash Expenses	187,981.	2,622.
NET CASH INCOME	$ 40,548.	$ 565.
Plus: Inventory Change	$ 3,513.	$ 95.
Less: Depreciation	23,512.	329.
NET FARM INCOME	$ 20,549.	$ 287.
Less: Value of Unpaid Family Labor	$ 700.	$ 10.
Interest on Equity @ 10%	12,801.	179.
LABOR AND MANAGEMENT INCOME	$ 7,048.	$ 98.

NET COST OF PRODUCTION

The Net Cost of Producing Milk for this group of farms was $202,966. per farm or $2,831. per cow. On a per hectolitre of milk sold basis, this cost was $49.88. The return from the sale of milk averaged $47.59 leaving a negative return over costs of $2.29 per hectolitre.

Note that all costs, including a value for Operator Labor have been included in this calculation. If Operator Labor was excluded, the Net Cost would have been $45.86, leaving a Net Return of $1.73. This then would be the return to Operator Labor.

TABLE D-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$187,981.	$2,622.
Plus: Depreciation		23,512.	328.
Inventory Change		-(3,513.)	-(49.)
Interest on Equity		12,801.	179.
Unpaid Family Labor		700.	10.
Operator Labor		16,360.	228.
Less: Sales (Excl. Milk)		34,875.	486.
NET COST OF PRODUCING MILK		$202,966.	$2,831.
Number of Cows	(#)	72	1
Total Litres of Milk Sold	(L)	406,894	5,675
Price Received per HL	($)	47.59	47.59
Cost of Producing Milk per HL	($)	49.88	49.88
NET RETURN PER HL	($)	$ -(2.29)	$-(2.29)

PRODUCTION ANALYSIS

This group of farms averaged 72 cows per farm, with production of 406,894 litres of milk sold per farm, or 5,675 litres per cow. Feed Cost, the largest single expense item averaged $54,837. per farm, $765. per cow, or $13.48 per hectolitre of milk sold. In percentage terms, feed cost averaged 25.9 percent of Total Costs, or 28.3 percent of Milk Sales. Each cow consumed a total of 2,721 kilograms of feed.

TABLE D-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	72	1
Total Litres of Milk Sold	(L)	406,894	5,675
Value of Milk Sold	($)	193,654	2,701
Price Received per HL Milk	($)	47.59	47.59
Fluid Milk (L's as % of Total Milk)	(%)	68.7	68.7
Fluid Milk ($'s as % of Total Milk)	(%)	72.3	72.3
Cost of Dairy Feed	($)	54,837	765
Feed Cost per HL Milk Sold	($)	13.48	13.48
Feed Cost as % of Total Cost	(%)	25.9	25.9
Feed Cost as % of Milk Sales	(%)	28.3	28.3
Kilograms of Feed/HL Milk	(kgs)	47.9	47.9
Kilograms of Feed	(kgs)	195,912	2,721
Pounds of Feed	(Lbs)	430,992	5,986

BALANCE SHEET

The Balance Sheet provides a picture of the financial structure of a business at a particular point in time. There are three (3) main parts to a Balance Sheet, namely:

ASSETS which are items of value owned by the business.

LIABILITIES which are debts owed by the business to others.

EQUITY OR NET WORTH which is the difference between Assets and Liabilities.

For farms in this size range, Inventory Value of Assets averaged $356,703., with Liabilities of $228,690.00. Equity averaged $128,013. per farm or $1,786. on a per cow basis.

TABLE D-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 50,640.	$ 706.
" " - Buildings	71,240.	994.
" " - Machinery	66,792.	932.
" " - Livestock	94,318.	1,316.
" " - Crops & Supplies	17,308.	241.
" " - Milk Quota	29,825.	416.
" " - Acct's Receivable	25,292.	353.
" " - Other	1,287.	18.
TOTAL INVENTORY VALUE - ASSETS	$356,703.	$ 4,975.
LIABILITIES:		
Short Term	$ 28,814.	$ 402.
Intermediate Term	40,825.	569.
Long Term	159,051.	2,218.
TOTAL LIABILITIES	$228,690.	$ 3,190.
EQUITY OR NET WORTH	$128,013.	$ 1,786.

BALANCE SHEET ANALYSIS

Equity in farms of this size range averaged 35.9 percent. Farmers received a return to equity of 2.73 percent, while a 6.86 percent return to total investment was achieved.

Capital Turnover was achieved in 1.53 years.

Debt to Equity ratio averaged 1.79.

Net Farm Income as a percent of Total Farm Income averaged 8.86 percent for this group of farms.

TABLE D-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	35.89
Return on Equity	(%)	2.73
Return on Invested Capital	(%)	6.86
Capital Turnover	(Yrs)	1.53
Current Assets/Current Liabilities	($)	4.80
Total Assets/Total Liabilities	($)	1.56
Total Liabilities/Equity	($)	1.79
Net Income/Gross Income	(%)	8.86

LABOR ANALYSIS

The labor requirement for farms in this size group is estimated to be 3.23 man equivalents, made up of 1.29 operator and family man equivalents and 1.94 hired man equivalents. For each man equivalent, 22 cows were maintained with production of 125,950 litres of milk.

Labor income per man equivalent averaged $5,992. for farms in this size range.

TABLE D-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	73
Operator & Family Man Equivalents	(#)	1.29
Hired Man Equivalents	(#)	1.94
Total Man Equivalents	(#)	3.23
Cows per Man Equivalent	(#)	22
Milk Sold per Man Equivalent	(L)	125,950
Milk Sold per Man Equivalent	($)	59,955
Labor Income per Man Equivalent Operator & Unpaid Family	($)	5,992

ANALYSIS OF EXPENSES

Purchased dairy feed accounted for 25.9 percent of Total Farm Expenses. Feed was followed by depreciation at 11.1 percent, hired labor at 10.1 percent, interest at 9.9 percent, and crop expenses and tractor & machinery expenses each at 6.4 percent of Total Expenses.

TABLE D-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 95.	3.3 %
Dairy Feed	765.	25.9
Livestock Purchased	86.	2.9
Vet & Drugs	33.	1.1
Breeding	33.	1.1
Dairy Supplies	62.	2.1
Milk Marketing	155.	5.2
Crop Expenses	188.	6.4
Building & Fence Repairs	60.	2.0
Utilities	71.	2.4
Tractor & Machinery Expenses	190.	6.4
Truck & Auto Expenses	45.	1.6
Interest	291.	9.9
Hired Labor	298.	10.1
Taxes	20.	0.7
Insurance	44.	1.5
Miscellaneous	186.	6.3
Depreciation	328.	11.1
TOTAL EXPENSES	$2,950.	100.0 %

RECEIPTS AND EXPENSES SUMMARY

For this group of farms, information in the table below is presented on a per cow, per hectolitre and a per hundredweight of milk sold basis.

TABLE D-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER 100 LITRES	PER CWT.
RECEIPTS:			
Fluid Milk	$ 1,954.	$ 34.43	$ 15.17
Manufactured Milk	648.	11.42	5.03
Milk Subsidy	99.	1.75	0.77
Livestock Sales	237.	4.17	1.84
Crop Sales	47.	0.84	0.37
Miscellaneous Sales	202.	3.56	1.57
TOTAL CASH RECEIPTS	$ 3,187.	$ 56.16	$ 24.74
Adj. for Inventory Change	$ 49.	$ 0.86	$ 0.38
TOTAL FARM RECEIPTS	$ 3,236.	$ 57.03	$ 25.12
EXPENES:			
Milk Hauling	$ 95.	$ 1.68	$ 0.74
Dairy Feed	765.	13.48	5.94
Livestock Purchases	86.	1.51	0.66
Vet & Drugs	33.	0.58	0.26
Breeding	33.	0.58	0.26
Dairy Supplies	62.	1.10	0.48
Milk Marketing	155.	2.73	1.20
Crop Expenses	188.	3.31	1.46
Building & Fence Repair	60.	1.05	0.46
Utilities	71.	1.24	0.55
Tractor & Machinery Repair	190.	3.35	1.47
Truck & Auto Expense	45.	0.80	0.35
Interest	291.	5.13	2.26
Hired Labor	298.	5.25	2.31
Taxes	20.	0.35	0.15
Insurance	44.	0.78	0.34
Miscellaneous	186.	3.28	1.44
TOTAL CASH EXPENSES	$ 2,622.	$ 46.20	$ 20.35
Building Depreciation	$ 90.	$ 1.59	$ 0.70
Machinery Depreciation	238.	4.19	1.84
TOTAL DEPRECIATION	$ 328.	$ 5.78	$ 2.55
TOTAL FARM EXPENSES	$ 2,950.	$ 51.98	$ 22.90
NET FARM INCOME	$ 287.	$ 5.05	$ 2.22

Section E

Unit Size

100+ cows

RECEIPTS

Farms in this size range had average Farm Receipts of $440,106. per farm and $3,179. on a per cow basis.

These farms are highly specialized dairy units with income from milk sales and milk subsidy accounting for 85.7 percent of Total Farm Receipts. Of this amount, fluid sales accounted for 64.9 percent, manufactured milk 30.3 percent and milk subsidy 4.7 percent of Milk Receipts.

Livestock sales amounted to 6.3 percent, crop sales 1.5 percent, and miscellaneous sales 6.5 percent of Total Farm Receipts.

TABLE E-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$244,987.	$ 1,770.
Manufactured Milk Sales	114,420.	826.
Milk Subsidy	17,838.	129.
Livestock Sales	27,598.	199.
Crop Sales	6,806.	49.
Miscellaneous Sales	28,458.	206.
TOTAL FARM RECEIPTS	$440,106.	$ 3,179.

EXPENSES

Total Cash Expenses averaged $340,922. per farm or $2,463. per cow for farms in this size group.

Purchased dairy feed was the largest single expense item and accounted for $752. per cow, or 30.5 percent of Total Cash Expenses. Feed was followed by labor at 10.5 percent, miscellaneous at 10.0 percent, interest at 7.9 percent and tractor & machinery expense at 7.6 percent of Total Cash Expenses.

TABLE E-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 13,404.	$ 97.
Dairy Feed	104,166.	752.
Livestock Purchased	5,619.	41.
Vet & Drugs	3,961.	29.
Breeding	3,780.	27.
Dairy Supplies	7,361.	53.
Milk Marketing	25,197.	182.
Crop Expenses	25,103.	181.
Building & Fence Repairs	9,446.	68.
Utilities	9,506.	69.
Tractor & Machinery Expense	25,685.	186.
Truck & Auto Expense	5,040.	36.
Interest	26,878.	194.
Hired Labor	35,650.	258.
Taxes	1,675.	12.
Insurance	4,359.	31.
Miscellaneous	34,093.	246.
TOTAL CASH EXPENSES	$340,922.	$ 2,463.

INCOME SUMMARY

Different measures of income are often used when analysing a farm business to provide information about that business. In this section, we calculate three (3) different income levels, namely:

NET CASH INCOME which is the difference between Total Farm Receipts and Total Cash Expenses. For these farms, Net Cash Income was $99,184. per farm or $716. per cow.

NET FARM INCOME further adjusts Net Cash Income for inventory change and depreciation, and represents the return to the operator for his labor, management and capital. For these farms, Net Farm Income was $66,439. or $480. per cow.

LABOR AND MANAGEMENT INCOME represents the return to the operator for his labor and management skills. It is found by adjusting Net Farm Income for Unpaid Family Labor and Return to Equity Capital. For these farms, Labor and Management Income was $42,229. per farm or $306. per cow.

TABLE E-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$440,106.	$ 3,179.
Total Cash Expenses	340,922.	2,463.
NET CASH INCOME	$ 99,184.	$ 716.
Plus: Inventory Change	$ 6,830.	$ 49.
Less: Depreciation	39,575.	286.
NET FARM INCOME	$ 66,439.	$ 480.
Less: Value of Unpaid Family Labor	$ 614.	$ 4.
Interest on Equity @ 10%	23,596.	170.
LABOR AND MANAGEMENT INCOME	$ 42,229.	$ 306.

NET COST OF PRODUCTION

The Net Cost of Producing Milk for this group of farms averaged $45.13 per hectolitre. Revenue from the sale of milk and milk subsidy averaged $46.97, leaving a Net Return of $1.84 per hectolitre.

It should be noted that all costs have been included in the above calculation, including a value for operator labor. If operator labor was excluded, the net cost would be $41.71, leaving a Net Return of $5.26 - this then would be the return to the operator for his labor and management.

TABLE E-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$340,922.	$ 2,463.
Plus: Depreciation		39,575.	286.
Inventory Change		-(6,830.)	-(49.)
Interest on Equity @ 10%		23,596.	170.
Value of Unpaid Family Labor		614.	4.
Operator Labor		27,487.	199.
Less: Sales (Excl. Milk)		62,862.	454.
NET COST OF PRODUCING MILK		$362,503.	$ 2,618.
Number of Cows	(#)	138	1
Total Litres of Milk Sold	(L)	803,237	5,802
Price Received per HL	($)	46.97	46.97
Cost of Producing Milk per HL	($)	45.13	45.13
NET RETURN PER HL	($)	1.84	1.84

PRODUCTION ANALYSIS

For this group, the average number of cows maintained per farm was 138, with production per cow of 5,802 litres of milk valued at $2,725. per cow.

Purchased dairy feed accounted for $752. per cow, or 27.4 percent of Total Farm Expenses. Feed cost per hectolitre averaged $12.97 for these farms.

Each cow maintained consumed 2,598 kilograms of feed to produce 5,802 litres of milk. Hence, feed consumed per hectolitre was 44.78 kilograms.

TABLE E-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	138	1
Total Litres of Milk Sold	(L)	803,237	5,802
Value of Milk Sold	($)	377,245	2,725
Price Received per HL Milk	($)	46.97	46.97
Fluid Milk (L's as % of Total Milk)	(%)	61.4	61.4
Fluid Milk ($'s as % of Total Milk)	(%)	64.9	64.9
Cost of Dairy Feed	($)	104,166	752
Feed Cost per HL Milk Sold	($)	12.97	12.97
Feed Cost as % of Total Cost	(%)	27.4	27.4
Feed Cost as % of Milk Sales	(%)	27.6	27.6
Kilograms of Feed/HL Milk	(Kgs)	44.78	44.78
Kilograms of Feed	(Kgs)	358,524	2,598
Pounds of Feed	(Lbs)	788,808	5,716

BALANCE SHEET

The Balance Sheet is one of the basic financial statements of any business. The balance sheet provides a picture of the financial strength of a business at a particular point in time.

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between Assets and Liabilities and represents the owners contribution to the total capital of the business.

Farms in this size range had assets valued at $529,066. per farm or $3,822. per cow, while liabilities averaged $293,101. per farm or $2,117. per cow. Equity averaged $235,964. per farm or $1,704. on a per cow basis.

TABLE E-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 69,524.	$ 502.
" " - Buildings	97,593.	705.
" " - Machinery	111,175.	803.
" " - Livestock	158,997.	1,148.
" " - Crops & Supplies	33,735.	244.
" " - Milk Quota	22,309.	161.
" " - Acct's Receivable	35,733.	258.
TOTAL INVENTORY VALUE - ASSETS	$529,066.	$ 3,822.
LIABILITIES:		
Short Term	$ 37,477.	$ 271.
Intermediate Term	70,854.	512.
Long Term	184,770.	1,335.
TOTAL LIABILITIES	$293,101	$ 2,117.
EQUITY OR NET WORTH	$235,964.	$ 1,704.

BALANCE SHEET ANALYSIS

Equity in farms in this group averaged 44.6 percent, with a return to equity achieved of 16.3 percent. Return to total capital was 12.3 percent.

Capital turnover was achieved in 1.2 years.

Current ratio averaged 6.10, while Total Assets to Total Liabilities averaged 1.8.

Net Income as a percent of Gross Farm Income was 14.9 percent for these farms.

TABLE E-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	44.6
Return on Equity	(%)	16.3
Return on Invested Capital	(%)	12.3
Capital Turnover	(Yrs)	1.2
Current Assets/Current Liabilities	($)	6.1
Total Assets/Total Liabilities	($)	1.8
Total Liabilities/Equity	($)	1.2
Net Income/Gross Income	(%)	14.9

LABOR ANALYSIS

The labor requirement for farms in this group was estimated to be 5.06 man equivalents of which 1.83 were operator and unpaid family, and 3.23 were hired man equivalents.

For each man equivalent, 27 cows were maintained with production of 158,614 litres of milk valued at $74,554.00.

Labor income per man equivalent was $23,404.00.

TABLE E-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	138
Operator & Family Man Equivalents	(#)	1.83
Hired Man Equivalents	(#)	3.23
Total Man Equivalents	(#)	5.06
Cows per Man Equivalent	(#)	27
Milk Sold per Man Equivalent	(L)	158,614
Milk Sold per Man Equivalent	($)	74,554
Labor Income per Man Equivalent Operator & Unpaid Family	($)	23,404

ANALYSIS OF EXPENSES

In analyzing the various expenses for this group of farms, purchased dairy feed accounted for 27.4 percent of Total Farm Expenses. Other major expense items included; depreciation at 10.4 percent, labor at 9.4 percent, miscellaneous at 9.0 percent, and interest at 7.1 percent of Total Farm Expenses.

TABLE E-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 97.	3.5 %
Dairy Feed	752.	27.4
Livestock Purchased	41.	1.5
Vet & Drugs	29.	1.0
Breeding	27.	1.0
Dairy Supplies	53.	1.9
Milk Marketing	182.	6.6
Crop Expenses	181.	6.6
Building & Fence Repairs	68.	2.5
Utilities	69.	2.5
Tractor & Machinery Expenses	186.	6.7
Truck & Auto Expenses	36.	1.3
Interest	194.	7.1
Hired Labor	258.	9.4
Taxes	12.	0.4
Insurance	31.	1.2
Miscellaneous	246.	9.0
Depreciation	286.	10.4
TOTAL EXPENSES	$ 2,748.	100.0 %

RECEIPTS AND EXPENSES SUMMARY

Information presented in this section is on a per cow, per hectolitre and a per hundredweight milk sold basis.

TABLE E-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER 100 LITRES	PER CWT.
RECEIPTS:			
Fluid Milk	$ 1,770.	$ 30.50	$ 13.44
Manufactured Milk	826.	14.24	6.28
Milk Subsidy	129.	2.22	0.98
Livestock Sales	199.	3.44	1.51
Crop Sales	49.	0.85	0.37
Miscellaneous Sales	206.	3.54	1.56
TOTAL CASH RECEIPTS	$ 3,179.	$ 54.79	$ 24.14
Adj. for Inventory Change	$ 49.	$ 0.85	$ 0.37
TOTAL FARM RECEIPTS	$ 3,228.	$ 55.64	$ 24.51
EXPENSES:			
Milk Hauling	$ 97.	$ 1.67	$ 0.74
Dairy Feed	752.	12.97	5.71
Livestock Purchases	41.	0.70	0.31
Vet & Drugs	29.	0.49	0.22
Breeding	27.	0.47	0.21
Dairy Supplies	53.	0.92	0.40
Milk Marketing	182.	3.14	1.38
Crop Expenses	181.	3.13	1.38
Building & Fence Repair	68.	1.18	0.52
Utilities	69.	1.18	0.52
Tractor & Machinery Repair	186.	3.20	1.41
Truck & Auto Expense	36.	0.63	0.28
Interest	194.	3.35	1.47
Hired Labor	258.	4.44	1.96
Taxes	12.	0.21	0.09
Insurance	31.	0.54	0.24
Miscellaneous	246.	4.24	1.87
TOTAL CASH EXPENSES	$ 2,463.	$ 42.44	$ 18.70
Building Depreciation	$ 67.	$ 1.15	$ 0.51
Machinery Depreciation	219.	3.78	1.36
TOTAL DEPRECIATION	$ 286.	$ 4.93	$ 2.17
TOTAL FARM EXPENSES	$ 2,748.	$ 47.37	$ 20.87
NET FARM INCOME	$ 480.	$ 8.27	$ 3.64

Section F

Analysis of

All Farms

RECEIPTS

Total Farm Receipts for all farms in the study averaged $203,179. per farm or $3,173. on a per cow basis. These farms are highly specialized dairy farms with 84.7 percent of Farm Receipts in the form of milk sales and milk subsidy.

Livestock sales accounted for another 7.0 percent, while crop sales and miscellaneous sales amounted to 1.4 and 7.0 percent respectfully.

TABLE F-1: RECEIPTS

ITEM	PER FARM	PER COW
Fluid Milk Sales	$119,336.	$ 1,864.
Manufactured Milk Sales	45,501.	711.
Milk Subsidy	7,190.	112.
Livestock Sales	14,140.	221.
Crop Sales	2,808.	44.
Miscellaneous Sales	14,205.	222.
TOTAL FARM RECEIPTS	$203,179.	$ 3,173.

EXPENSES

When all farms in the study are combined, average Cash Expenses were $163,372. per farm, or $2,552. on a per cow basis. Purchased dairy feed was the largest expense item at $770. per cow or 30.2 percent of Cash Expenses. Other major expense items included interest at 10.3 percent, hired labor at 10.0 percent, miscellaneous at 7.6 percent and crop expenses at 7.2 percent of Total Cash Expenses.

TABLE F-2: EXPENSES

ITEM	PER FARM	PER COW
Milk Hauling	$ 6,127.	$ 96.
Dairy Feed	49,299.	770.
Livestock Purchases	4,713.	74.
Vet & Drugs	2,026.	32.
Breeding	2,152.	34.
Dairy Supplies	4,089.	64.
Milk Marketing	10,274.	160.
Crop Expenses	11,765.	184.
Building & Fence Repair	4,079.	64.
Utilities	5,053.	79.
Tractor & Machinery Repair	11,351.	177.
Truck & Auto Expense	3,116.	49.
Interest	16,799.	262.
Hired Labor	16,304.	255.
Taxes	1,233.	19.
Insurance	2,647.	41.
Miscellaneous	12,347.	193.
TOTAL CASH EXPENSES	$163,372.	$ 2,552.

INCOME SUMMARY

An analysis of income is an important part of any farm business analysis exercise. There are a number of different measures of income that are often used for this purpose. These include:

NET CASH INCOME which is the difference between Farm Receipts and Cash Expenses. For the total group, Net Cash Income averaged $39,807. per farm or $621. per cow.

NET FARM INCOME which represents the return to the operator for his labor and management and for his capital investment in the business. Net Farm Income averaged $21,761. per farm or $340. on a per cow basis for all farms in the summary.

LABOR AND MANAGEMENT INCOME which indicates the return to operator labor and management when all other costs are deducted. For all farms, this amount averaged $9,548. per farm or $142. per cow.

TABLE F-3: INCOME SUMMARY

ITEM	PER FARM	PER COW
Total Farm Receipts	$203,179.	$ 3,173.
Total Cash Expenses	163,372.	2,552.
NET CASH INCOME	$ 39,807.	$ 621.
Plus: Inventory Change	$ 2,606.	$ 41.
Less: Depreciation	20,653.	323.
NET FARM INCOME	$ 21,761.	$ 340.
Less: Value of Unpaid Family Labor	$ 556.	$ 9.
Interest on Equity @ 10%	11,657.	182.
LABOR AND MANAGEMENT INCOME	$ 9,548.	$ 142.

NET COST OF PRODUCTION

The Net Cost of Producing Milk averaged $2,776. per cow or $48.98 per hectolitre. Returns from the sale of milk were $47.41, leaving a net return of -($1.58) per hectolitre.

Note that all costs have been included in this calculation. If operator labor was excluded, the net cost would have been $44.77, providing a net return of $2.64. This amoung would represent the return to operator labor.

TABLE F-4: NET COST OF PRODUCTION

ITEM		PER FARM	PER COW
Total Cash Expenses		$163,372.	$ 2,552.
Plus: Depreciation		20,653.	323.
Inventory Change		-(2,606.)	-(41.)
Interest on Equity @ 10%		11,657.	182.
Value of Unpaid Family Labor		556.	9.
Operator Labor		15,269.	238.
Less: Sales (Excl. Milk)		31,153.	487.
NET COST OF PRODUCING MILK		$177,747.	$ 2,776.
Number of Cows	(#)	64	1
Total Litres of Milk Sold	(L)	362,874	5,667
Price Received per HL	($)	47.41	47.41
Cost of Producing Milk per HL	($)	48.98	48.98
NET RETURN PER HL	($)	-(1.58)	-(1.58)

PRODUCTION ANALYSIS

For all farms in the summary, the average herd size was 64 cows, each producing 5,667 litres of milk for sale. Price received per hectolitre was $47.41.

Purchased feed accounted for 26.8 percent of Total Farm Expenses. On a per hectolitre basis, feed cost was $13.59. For each cow maintained, 2,720 kilograms of feed were required.

TABLE F-5: PRODUCTION ANALYSIS

ITEM		PER FARM	PER COW
Number of Cows	(#)	64	1
Total Litres of Milk Sold	(L)	362,874	5,667
Value of Milk Sold	($)	172,027	2,687
Price Received per HL Milk	($)	47.41	47.41
Fluid Milk (L's as % of Total Milk)	(%)	65.8	65.8
Fluid Milk ($'s as % of Total Milk)	(%)	69.4	69.4
Cost of Dairy Feed	($)	49,299	770
Feed Cost per HL Milk Sold	($)	13.59	13.59
Feed Cost as % of Total Cost	(%)	26.8	26.8
Feed Cost as % of Milk Sales	(%)	28.7	28.7
Kilograms of Feed/HL Milk	(Kgs)	48.0	48.0
Kilograms of Feed	(Kgs)	174,080	2,720
Pounds of Feed	(Lbs)	383,040	5,985

BALANCE SHEET

The Balance Sheet is one of the fundamental tools of a farm business. The Balance Sheet provides information about the financial structure and health of the business at a specific point in time. There are three (3) main parts to a Balance Sheet.

ASSETS are items of value owned by the business.

LIABILITIES are debts owed by the business to others.

EQUITY OR NET WORTH is the difference between assets and liabilities and represents the owners capital contribution to the business.

For the total group, assets were $305,976., while liabilities averaged $189,405.00. Equity averaged $116,571. per farm or $1,821. on a per cow basis.

TABLE F-6: BALANCE SHEET

ITEM	PER FARM	PER COW
ASSETS:		
Inventory Value - Land	$ 48,352.	$ 755.
" " - Buildings	61,544.	961.
" " - Machinery	56,573.	884.
" " - Livestock	81,631.	1,275.
" " - Crops	14,675.	229.
" " - Milk Quota	21,905.	342.
" " - Acct's Receivable	20,184.	315.
" " - Other	1,113.	17.
TOTAL INVENTORY VALUE - ASSETS	$305,976.	$ 4,779.
LIABILITIES:		
Short Term	$ 20,407.	$ 319.
Intermediate Term	31,738.	496.
Long Term	137,261.	2,144.
TOTAL LIABILITIES	$189,405.	$ 2,958.
EQUITY OR NET WORTH	$116,571.	$ 1,821.

BALANCE SHEET ANALYSIS

When all farms were combined, average equity in the farm business was 38.1 percent. Farms received a 5.09 percent return to equity capital and a 7.46 percent return to total capital investment.

Capital turnover was achieved in 1.48 years.

Total Assets to Total Liabilities ratio averaged $1.62.

Net Farm Income as a percent of Total Farm Income averaged 10.57 percent.

TABLE F-7: BALANCE SHEET ANALYSIS

ITEM		PER FARM
Equity in Farm Business	(%)	38.1
Return on Equity	(%)	5.09
Return on Invested Capital	(%)	7.46
Capital Turnover	(Yrs)	1.48
Current Assets/Current Liabilities	($)	5.76
Total Assets/Total Liabilities	($)	1.62
Total Liabilities/Equity	($)	1.62
Net Income/Gross Income	(%)	10.57

LABOR ANALYSIS

For all farms in the summary, the labor required is estimated to be 2.78 man equivalents, composed of 1.3 operator and family, and 1.48 hired man equivalents.

For each man equivalent, 23 cows were maintained producing for sale 130,422 litres of milk valued at $61,880.00.

Labor Income per man equivalent for operator and family labor was $7,751.00.

TABLE F-8: LABOR ANALYSIS

ITEM		PER FARM
Number of Cows	(#)	64
Operator & Family Man Equivalents	(#)	1.30
Hired Man Equivalents	(#)	1.48
Total Man Equivalents	(#)	2.78
Cows per Man Equivalent	(#)	23
Milk Sold per Man Equivalent	(L)	130,422
Milk Sold per Man Equivalent	($)	61,880
Labor Income per Man Equivalent Operator & Unpaid Family	($)	7,751

ANALYSIS OF EXPENSES

A review of the costs associated with producing milk indicates that at the Net Farm Income level, purchased dairy feed accounted for 26.8 percent of Total Expenses. Other major expense items included - depreciation at 11.2 percent, interest at 9.1 percent, hired labor at 8.9 percent and miscellaneous at 6.7 percent of Total Expenses.

TABLE F-9: ANALYSIS OF EXPENSES

ITEM	PER COW	PERCENTAGE
Milk Hauling	$ 96.	3.3 %
Dairy Feed	770.	26.8
Livestock Purchased	74.	2.6
Vet & Drugs	32.	1.1
Breeding	34.	1.2
Dairy Supplies	64.	2.2
Milk Marketing	160.	5.6
Crop Expenses	184.	6.4
Building & Fence Repairs	64.	2.2
Utilities	79.	2.7
Tractor & Machinery Expenses	177.	6.2
Truck & Auto Expenses	49.	1.7
Interest	262.	9.1
Hired Labor	255.	8.9
Taxes	19.	0.7
Insurance	41.	1.4
Miscellaneous	193.	6.7
Depreciation	323.	11.2
TOTAL EXPENSES	$2,874.	100.0 %

RECEIPTS AND EXPENSES SUMMARY

Information contained in the table below is presented on a per cow, per hectolitre and a per hundredweight milk sold basis.

TABLE F-10: RECEIPTS AND EXPENSES SUMMARY

ITEM	PER COW	PER 100 LITRES	PER CWT.
RECEIPTS:			
Fluid Milk	$1,864.	$ 32.89	$ 14.49
Manufactured Milk	711.	12.54	5.52
Milk Subsidy	112.	1.98	0.87
Livestock Sales	221.	3.90	1.72
Crop Sales	44.	0.77	0.34
Miscellaneous Sales	222.	3.91	1.72
TOTAL FARM RECEIPTS	$3,173.	$ 55.99	$ 24.67
Adj. for Inventory Change	$ 41.	$ 0.72	$ 0.32
TOTAL FARM INCOME	$3,214.	$ 56.71	$ 24.98
EXPENSES:			
Milk Hauling	$ 96.	$ 1.69	$ 0.74
Dairy Feed	770.	13.59	5.98
Livestock Purchases	74.	1.30	0.57
Vet & Drugs	32.	0.56	0.25
Breeding	34.	0.59	0.26
Dairy Supplies	64.	1.13	0.50
Milk Marketing	160.	2.83	1.25
Crop Expenses	184.	3.24	1.43
Building & Fence Repair	64.	1.12	0.50
Utilities	79.	1.39	0.61
Tractor & Machinery Expense	177.	3.13	1.38
Truck & Auto Expense	49.	0.86	0.38
Interest	262.	4.63	2.04
Hired Labor	255.	4.49	1.98
Taxes	19.	0.34	0.15
Insurance	41.	0.73	0.32
Miscellaneous	193.	3.40	1.50
TOTAL CASH EXPENSES	$2,552.	$ 45.02	$ 19.83
Building Depreciation	$ 86.	$ 1.52	$ 0.67
Machinery Depreciation	237.	4.17	1.84
TOTAL DEPRECIATION	$ 323.	$ 5.69	$ 2.51
TOTAL FARM EXPENSES	$2,874.	$ 50.71	$ 22.34
NET FARM INCOME	$ 340.	$ 6.00	$ 2.64

Section G

Net Farm Income

Analysis

One of the key factors studied when analyzing a farm business is Net Farm Income. This factor is important as it provides the return to the operator for his labor and management skills along with a return to equity capital in the business. A study of the various groupings below can provide some indication of why there are such wide variations in the Net Farm Incomes of the farms in this summary.

The one hundred and forty-five (145) farms in the summary were re-organized into three groupings based on Net Farm Income per Cow. These groups were - (1) the high 25 percent Net Farm Income per Cow Farms, (2) the middle 50 percent Net Farm Income per Cow Farms and (3) the low 25 percent Net Farm Income per Cow Farms.

Similar assumptions regarding Interest on Equity, Operator and Family Labor were made for this section as were made throughout the summary.

Table G-1 provides data on a per farm basis, while Table G-1 provides the data on a per cow basis.

A review of the tables shows that the High Net Farm Income per Cow group received a return to all factors of production at the assumed levels. The middle and low groups did not receive a return sufficient to meet all costs.

The High Net Farm Income Group had Net Income per Cow of $768., while the Middle and Low groups averaged $298. and $-(99.) respectfully.

Return on Equity averaged 17.2 percent for the high group, while the low group received no return to equity.

Net Income as a percent of Gross Income averaged 22.3 percent for the High Group and -0- for the Low Group.

TABLE G-1

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
RECEIPTS:			
Fluid Milk	$ 149,923.	$ 110,313.	$ 107,044.
Manufactured Milk	52,512.	43,715.	42,112.
Milk Subsidy	8,730.	6,699.	6,645.
Livestock Sales	18,205.	12,608.	13,184.
Crop Sales	2,999.	3,235.	1,750.
Miscellaneous Sales	15,892.	13,086.	14,787.
TOTAL CASH RECEIPTS	$ 248,261.	$ 189,655.	$ 185,522.
Adj. for Inventory Change	$ 5,223.	$ 1,158.	$ 2,927.
TOTAL FARM RECEIPTS	$ 253,484.	$ 190,813.	$ 188,448.
EXPENSES:			
Milk Hauling	$ 7,295.	$ 5,894.	$ 5,429.
Dairy Feed	57,156.	48,152.	43,770.
Livestock Purchases	4,663.	3,259.	7,712.
Vet & Drugs	2,271.	1,899.	2,040.
Breeding	2,899.	1,848.	2,021.
Dairy Supplies	4,151.	4,136.	3,931.
Milk Marketing	11,362.	10,101.	9,536.
Crop Expenses	12,898.	10,585.	13,025.
Building & Fence Repair	3,973.	3,892.	4,564.
Utilities	5,122.	4,913.	5,265.
Tractor & Machinery Repair	11,466.	10,153.	13,666.
Truck & Auto Expense	3,210.	2,875.	3,511.
Interest	13,535.	15,850.	21,987.
Hired Labor	15,882.	15,875.	17,595.
Taxes	1,227.	1,236.	1,231.
Insurance	2,500.	2,580.	2,931.
Miscellaneous	14,519.	10,748.	13,417.
TOTAL CASH EXPENSES	$ 174,128.	$ 153,996.	$ 171,631.

TABLE G-1 (Cont'd)

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
Building Depreciation		$ 6,079.	$ 5,053.	$ 5,851.
Machinery Depreciation		16,724.	13,503.	16,905.
TOTAL DEPRECIATION		$ 22,803.	$ 18,555.	$ 22,756.
TOTAL FARM EXPENSES		$ 196,930.	$ 172,551.	$ 194,387.
NET FARM INCOME		$ 56,553.	$ 18,262.	$ -(5,939.)
Total Farm Expense		$ 196,930.	$ 172,551.	$ 194,387.
Plus: Interest on Equity		19,203.	11,034.	5,374.
Unpaid Family Labor		955.	547.	173.
Operator Labor		19,956.	14,344.	12,651.
Less: Sales (Excl. Milk)		37,096.	28,928.	29,721.
NET COST OF PRODUCING MILK		$ 199,948.	$ 169,548.	$ 182,865.
Number of Farms	(#)	36	73	36
Number of Cows/Farm	(#)	74	61	60
Litres of Milk/Farm	(L)	445,891	337,849	330,602
Price of Milk/HL	($)	47.36	47.57	47.13
Cost of Producing Milk/HL	($)	44.84	50.18	55.31
NET RETURN/HL	($)	2.52	-(2.61)	-(8.19)
Investment/Farm	($)	349,413	289,654	295,637
Liabilities/Farm	($)	157,386	179,311	241,893
Feed Cost/HL Milk Sold	($)	12.82	14.25	13.24
Equity in Business	(%)	55.0	38.1	18.2
Return on Equity	(%)	17.2	4.7	-0-
Return on Invested Capital	(%)	14.5	6.8	1.2
Net Income/Gross Income	(%)	22.3	9.6	-0-

TABLE G-2

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
RECEIPTS:			
Fluid Milk	$ 2,036.	$ 1,801.	$ 1,783.
Manufactured Milk	713.	714.	702.
Milk Subsidy	119.	109.	111.
Livestock Sales	247.	206.	220.
Crop Sales	41.	53.	29.
Miscellaneous Sales	216.	214.	246.
TOTAL CASH RECEIPTS	$ 3,371.	$ 3,096.	$ 3,091.
Adj. for Inventory Change	$ 71.	$ 19.	$ 49.
TOTAL FARM RECEIPTS	$ 3,442.	$ 3,115.	$ 3,139.
EXPENSES:			
Milk Hauling	$ 99.	$ 96.	$ 90.
Dairy Feed	776.	786.	729.
Livestock Purchases	63.	53.	128.
Vet & Drugs	31.	31.	34.
Breeding	39.	30.	34.
Dairy Supplies	56.	68.	65.
Milk Marketing	154.	165.	159.
Crop Expenses	175.	173.	217.
Building & Fence Repair	54.	64.	76.
Utilities	70.	80.	88.
Tractor & Machinery Repair	156.	166.	228.
Truck & Auto Expense	44.	47.	58.
Interest	184.	259.	366.
Hired Labor	216.	259.	293.
Taxes	17.	20.	21.
Insurance	34.	42.	49.
Miscellaneous	197.	175.	224.
TOTAL CASH EXPENSES	$ 2,365.	$ 2,514.	$ 2,859.

TABLE G-2 (Cont'd)

HIGH, MEDIUM AND LOW NET FARM INCOME PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH N.F.I./COW	MEDIUM N.F.I./COW	LOW N.F.I./COW
Building Depreciation		$ 83.	$ 82.	$ 97.
Machinery Depreciation		227.	220.	282.
TOTAL DEPRECIATION		$ 310.	$ 303.	$ 379.
TOTAL FARM EXPENSES		$ 2,674.	$ 2,817.	$ 3,238.
NET FARM INCOME		$ 768.	$ 298.	$ -(99.)
Total Farm Expense		$ 2,674.	$ 2,817.	$ 3,238.
Plus: Interest on Equity		261.	180.	90.
Unpaid Family Labor		13.	9.	3.
Operator Labor		271.	234.	211.
Less: Sales (Excl. Milk)		504.	472.	495.
NET COST OF PRODUCING MILK		$ 2,715.	$ 2,768.	$ 3,046.
Number of Farms	(#)	36	73	36
Number of Cows/Farm	(#)	74	61	60
Litres of Milk/Cow	(L)	6,055	5,515	5,507
Price of Milk/HL	($)	47.36	47.57	47.13
Cost of Producing Milk/HL	($)	44.84	50.18	55.31
NET RETURN/HL	($)	2.52	-(2.61)	-(8.19)
Investment/Cow	($)	4,745	3,933	4,015
Liabilities/Cow	($)	2,137	2,435	3,285
Feed Cost/HL Milk Sold	($)	12.82	14.25	13.24
Equity in Business	(%)	55.0	38.1	18.2
Return on Equity	(%)	17.2	4.7	-0-
Return on Invested Capital	(%)	14.5	6.8	1.2
Net Income/Gross Income	(%)	22.3	9.6	-0-

Section H

Production

Analysis

In the management of a business, output per unit of input is one of the key elements to the success of that business. In the dairy business, production per farm or more particularily, production per cow is one of the key factors determining the profitability of the farm business.

In this section of the summary, farms were reclassified according to production levels on a per cow basis. Three (3) levels were chosen as follows: (1) high 25 percent production per cow farms; (2) middle 50 percent production per cow farms, and (3) low 25 percent production per cow farms.

Assumptions regarding Operator and Family Labor and Interest on Equity were the same as used elsewhere in this summary.

Tables H-1 and H-2 present information on a per farm and per cow basis.

In analyzing the information found in the tables, it is noted that the high production per cow farms came closest to achieving a return to all factors of production. The high production group were $0.16 short of this objective.

The high production group had production of 6,876 litres per cow, while the low production group averaged 4,458 litres per cow.

TABLE H-1

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
RECEIPTS:			
Fluid Milk	$150,450.	$120,284.	$ 86,299.
Manufactured Milk	52,769.	46,685.	35,832.
Milk Subsidy	8,682.	7,477.	5,115.
Livestock Sales	18,092.	13,261.	11,973.
Crop Sales	4,501.	2,333.	2,079.
Miscellaneous Sales	16,211.	13,986.	12,641
TOTAL CASH RECEIPTS	$250,705.	$204,025.	$153,939.
Adj. for Inventory Change	$ 1,582.	$ 2,396.	$ 4,058.
TOTAL FARM RECEIPTS	$252,287.	$206,421.	$157,996.
EXPENSES:			
Milk Hauling	$ 7,359.	$ 6,205.	$ 4,736.
Dairy Feed	60,322.	50,189	36,473.
Livestock Purchases	5,922.	4,266.	4,411.
Vet & Drugs	2,505.	2,202.	1,191.
Breeding	3,147.	2,170.	1,119.
Dairy Supplies	4,786.	4,336.	2,891.
Milk Marketing	12,323.	10,431.	7,906.
Crop Expenses	13,029.	12,468.	9,075.
Building & Fence Repair	5,246.	4,072.	2,925.
Utilities	5,530.	5,167.	4,342.
Tractor & Machinery Repair	11,956.	11,971.	9,490.
Truck & Auto Expense	2,775.	3,404.	2,873.
Interest	18,233.	16,908.	15,142.
Hired Labor	19,756.	17,050.	11,338.
Taxes	1,282.	1,238.	1,172.
Insurance	3,084.	2,460.	2,590.
Miscellaneous	13,743.	12,845.	9,941.
TOTAL CASH EXPENSES	$190,996.	$167,384.	$127,615.

TABLE H-1 (Cont'd)

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
Building Depreciation		$ 6,383.	$ 5,499.	$ 4,641.
Machinery Depreciation		19,067.	14,370.	12,804.
TOTAL DEPRECIATION		$ 25,450.	$ 19,869.	$ 17,445.
TOTAL FARM EXPENSES		$216,446.	$187,253.	$145,060.
NET FARM INCOME		$ 35,841.	$ 19,168.	$ 12,937.
Total Farm Expense		$216,446.	$187,253.	$145,060.
Plus: Interest on Equity		17,386.	11,008.	7,245.
Unpaid Family Labor		811.	472.	469.
Operator Labor		16,758.	14,899.	14,563.
Less: Sales (Excl. Milk)		38,804.	29,580.	26,693.
NET COST OF PRODUCING MILK		$212,597.	$184,053.	$140,644.
Number of Farms	(#)	36	73	36
Number of Cows/Farm	(#)	65	65	60
Litres of Milk/Farm	(L)	447,543	367,855	268,105
Price of Milk/HL	($)	47.35	47.42	47.46
Cost of Producing Milk/HL	($)	47.50	50.03	52.46
NET RETURN/HL	($)	-(0.16)	-(2.61)	-(5.00)
Feed Cost/HL Milk Sold	($)	13.48	13.64	13.60
Feed Cost as % of Total Costs	(%)	27.9	26.8	25.1
Feed Cost as % of Milk Sales	(%)	28.5	28.8	28.7
Kilograms of Feed/HL Milk Sold	(Kgs)	47.1	48.5	48.2

TABLE H-2

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
RECEIPTS:			
Fluid Milk	$ 2,312.	$ 1,839.	$ 1,435.
Manufactured Milk	811.	714.	596.
Milk Subsidy	133.	114.	85.
Livestock Sales	278.	203.	199.
Crop Sales	69.	36.	35.
Miscellaneous Sales	249.	214.	210.
TOTAL CASH RECEIPTS	$ 3,852.	$ 3,118.	$ 2,560.
Adj. for Inventory Change	$ 24.	$ 37.	$ 67.
TOTAL FARM RECEIPTS	$ 3,876.	$ 3,155.	$ 2,627.
EXPENSES:			
Milk Hauling	$ 113.	$ 95.	$ 79.
Dairy Feed	927.	767.	606.
Livestock Purchases	91.	65.	73.
Vet & Drugs	38.	34.	20.
Breeding	48.	33.	19.
Dairy Supplies	74.	66.	48.
Milk Marketing	189.	159.	131.
Crop Expenses	200.	191.	151.
Building & Fence Repair	81.	62.	49.
Utilities	85.	79.	72.
Tractor & Machinery Repair	184.	183.	158.
Truck & Auto Expense	43.	52.	48.
Interest	280.	258.	252.
Hired Labor	304.	261.	189.
Taxes	20.	19.	19.
Insurance	47.	38.	43.
Miscellaneous	211.	196.	165.
TOTAL CASH EXPENSES	$ 2,935.	$ 2,558.	$ 2,122.

TABLE H-2 (Cont'd)

HIGH, MEDIUM AND LOW PRODUCTION PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH PROD./COW	MEDIUM PROD./COW	LOW PROD./COW
Building Depreciation		$ 98.	$ 84.	$ 77.
Machinery Depreciation		293.	220.	213.
TOTAL DEPRECIATION		$ 391.	$ 304.	$ 290.
TOTAL FARM EXPENSES		$ 3,326.	$ 2,862.	$ 2,412.
NET FARM INCOME		$ 551.	$ 293.	$ 215.
Total Farm Expense		$ 3,326.	$ 2,862.	$ 2,412.
Plus: Interest on Equity		267.	168.	120.
Unpaid Family Labor		12.	7.	8.
Operator Labor		257.	228.	242.
Less: Sales (Excl. Milk)		596.	452.	444.
NET COST OF PRODUCING MILK		$ 3,267.	$ 2,813.	$ 2,339.
Number of Farms	(#)	36	73	36
Number of Cows/Farm	(#)	65	65	60
Litres of Milk/Cow	(L)	6,876	5,623	4,458
Price of Milk/HL	($)	47.35	47.42	47.46
Cost of Producing Milk/HL	($)	47.50	50.03	52.46
NET RETURN/HL	($)	-(0.16)	-(2.61)	-(5.00)
Feed Cost/HL Milk Sold	($)	13.48	13.64	13.60
Feed Cost as % of Total Costs	(%)	27.3	26.8	25.1
Feed Cost as % of Milk Sales	(%)	28.5	28.8	28.7
Kilograms of Feed/HL Milk Sold	(Kgs)	47.1	48.5	48.2

Section I

Investment

Analysis

The level of capital investment in a business can be an important factor in determining the profitability of that business. In this section of the summary, farms are re-grouped into three (3) classifications as follows: (1) the high 25 percent Investment per Cow Farms, (2) the middle 50 percent Investment per Cow Farms, and (3) the low 25 percent Investment per Cow Farms.

Similar assumptions regarding Operator and Family Labor and Return on Equity were used for this section as were made throughout this summary.

Table I-1 provides data on a per farm basis, while Table I-2 provides data on a per cow basis.

The information contained in the tables reveals that no group received a return to all factors of production at the assumed levels. However, the Low Investment per Cow group came closest to achieving a positive return.

Investment per cow averaged $5,381. for the Low Investment per Cow group, and $7,753. for the High Investment per Cow group.

All groups received a Return to Equity ranging from 2.5 percent for the High Investment per Cow group, to 11.1 percent for the Low Investment per Cow group.

Net Income as a percent of Gross Farm Income ranged from 8.6 percent for the High Investment per Cow group, to 10.7 percent for the Low Investment per Cow group.

TABLE I-1

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER FARM ANALYSIS

ITEM	HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
RECEIPTS:			
Fluid Milk	$ 91,964.	$ 127,176.	$ 130,809.
Manufactured Milk	35,185.	45,654.	53,507.
Milk Subsidy	6,136.	7,243.	8,134.
Livestock Sales	12,522.	15,194.	13,622.
Crop Sales	2,446.	3,151.	2,473.
Miscellaneous Sales	12,739.	14,086.	15,911.
TOTAL CASH RECEIPTS	$ 160,993.	$ 212,504.	$ 226,457.
Adj. for Inventory Change	$ 1,880.	$ 2,593.	$ 3,360.
TOTAL FARM RECEIPTS	$ 162,874.	$ 215,097.	$ 229,817.
EXPENSES:			
Milk Hauling	$ 4,898.	$ 6,342.	$ 6,918.
Dairy Feed	38,084.	50,673.	57,728.
Livestock Purchases	5,787.	5,091.	2,873.
Vet & Drugs	1,488.	2,323.	1,963.
Breeding	2,143.	2,167.	2,130.
Dairy Supplies	3,552.	4,243.	4,313.
Milk Marketing	7,203.	10,256.	13,381.
Crop Expenses	8,934.	12,363.	13,384.
Building & Fence Repair	2,993.	4,052.	5,219.
Utilities	4,176.	5,135.	5,763.
Tractor & Machinery Repair	7,724.	12,601.	12,446.
Truck & Auto Expense	2,668.	3,202.	3,390.
Interest	17,540.	16,987.	15,676.
Hired Labor	10,351.	17,878.	19,063.
Taxes	1,253.	1,184.	1,309.
Insurance	2,439.	2,698.	2,752.
Miscellaneous	7,609.	12,111.	17,563.
TOTAL CASH EXPENSES	$ 128,842.	$ 169,305.	$ 185,872.

TABLE I-1 (Cont'd)

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER FARM ANALYSIS

ITEM		HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
RECEIPTS:				
Building Depreciation		$ 5,798.	$ 5,773.	$ 4,672.
Machinery Depreciation		14,240.	15,794.	14,743.
TOTAL DEPRECIATION		$ 20,038.	$ 21,566.	$ 19,415.
TOTAL FARM EXPENSES		$ 148,880.	$ 190,871.	$ 205,288.
NET FARM INCOME		$ 13,993.	$ 24,226.	$ 24,529.
Total Farm Expense		$ 148,880.	$ 190,871.	$ 205,288.
Plus: Interest on Equity		15,431.	11,893.	7,405.
Unpaid Family Labor		682.	523.	496.
Operator Labor		13,803.	15,264.	16,763.
Less: Sales (Excl. Milk)		27,708.	32,431.	32,006.
NET COST OF PRODUCING MILK		$ 151,088.	$ 186,121.	$ 197,945.
Number of Farms	(#)	36	73	36
Number of Cows/Farm	(#)	46	65	79
Litres of Milk/Farm	(L)	281,012	379,325	411,377
Price of Milk/HL	($)	47.43	47.47	47.27
Cost of Producing Milk/HL	($)	53.77	49.07	48.12
NET RETURN/HL	($)	-(6.34)	-(1.59)	-(0.85)
Investment/Farm	($)	357,081	309,459	247,807
Liabilities/Farm	($)	202,774	190,528	173,761
Feed Cost/HL Milk Sold	($)	13.55	13.36	14.03
Equity in Business	(%)	43.2	38.4	29.9
Return on Equity	(%)	2.5	7.4	11.1
Return on Invested Capital	(%)	5.0	8.4	9.5
Net Income/Gross Income	(%)	8.6	11.3	10.7

TABLE I-2

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER COW ANALYSIS

ITEM	HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
RECEIPTS:			
Fluid Milk	$ 1,997.	$ 1,945.	$ 1,650.
Manufactured Milk	764.	698.	700.
Milk Subsidy	133.	111.	103.
Livestock Sales	272.	232.	172.
Crop Sales	53.	48.	31.
Miscellaneous Sales	277.	215.	201.
TOTAL CASH RECEIPTS	$ 3,496.	$ 3,251.	$ 2,856.
Adj. for Inventory Change	$ 41.	$ 40.	$ 42.
TOTAL FARM RECEIPTS	$ 3,536.	$ 3,290.	$ 2,899.
EXPENSES:			
Milk Hauling	$ 106.	$ 97.	$ 87.
Dairy Feed	827.	775.	728.
Livestock Purchases	126.	78.	36.
Vet & Drugs	32.	36.	25.
Breeding	47.	33.	27.
Dairy Supplies	77.	65.	54.
Milk Marketing	156.	157.	169.
Crop Expenses	194.	189.	169.
Building & Fence Repair	65.	62.	66.
Utilities	91.	79.	73.
Tractor & Machinery Repair	168.	193.	157.
Truck & Auto Expense	58.	49.	43.
Interest	381.	260.	198.
Hired Labor	225.	273.	240.
Taxes	27.	18.	17.
Insurance	53.	41.	35.
Miscellaneous	165.	185.	222.
TOTAL CASH EXPENSES	$ 2,798.	$ 2,590.	$ 2,345.

TABLE I-2 (Cont'd)

HIGH, MEDIUM AND LOW INVESTMENT PER COW FARMS

PER COW ANALYSIS

ITEM		HIGH INVEST./COW	MEDIUM INVEST./COW	LOW INVEST./COW
Building Depreciation		$ 126.	$ 88.	$ 59.
Machinery Depreciation		309.	242.	186.
TOTAL DEPRECIATION		$ 435.	$ 330.	$ 245.
TOTAL FARM EXPENSES		$ 3,233.	$ 2,920.	$ 2,589.
NET FARM INCOME		$ 304.	$ 371.	$ 309.
Total Farm Expense		$ 3,233.	$ 2,920.	$ 2,589.
Plus: Interest on Equity		335.	182.	93.
Unpaid Family Labor		15.	8.	6.
Operator Labor		300.	234.	211.
Less: Sales (Excl. Milk)		602.	496.	404.
NET COST OF PRODUCING MILK		$ 3,281.	$ 2,847.	$ 2,497.
Number of Farms	(#)	36	73	36
Number of Cows/Farm	(#)	46	65	79
Litres of Milk/Cow	(L)	6,102	5,803	5,189
Price of Milk/HL	($)	47.43	47.47	47.27
Cost of Producing Milk/HL	($)	53.77	49.07	48.12
NET RETURN/HL	($)	-(6.34)	-(1.59)	-(0.85)
Investment/Cow	($)	7,753	6,719	5,381
Liabilities/Cow	($)	4,403	4,137	3,773
Feed Cost/HL Milk Sold	($)	13.55	13.36	14.03
Equity in Business	(%)	43.2	38.4	29.9
Return on Equity	(%)	2.5	7.4	11.1
Return on Invested Capital	(%)	5.0	8.4	9.5
Net Income/Gross Income	(%)	8.6	11.3	10.7

Section J

Summary

The 1984 Nova Scotia Dairy Farm Business Summary provides basic information and statistics on the costs and returns associated with the dairy enterprise on Nova Scotia farms. While not based on a statistically sound random sample of dairy farms, the summary can be used with care to assist in the analysis of the dairy enterprise by providing group average data for comparison purposes.

Table J-1 provides a brief summary of a number of cost and profit ratios and management factors that are often used when analyzing a farm business. These ratios and management factors provide useful information about the financial and production strength of the farm business. In addition, weaknesses in the farm business can be pinpointed through an analysis of these ratios and management factors.

In reviewing these ratios and management factors, the following points are worthy of comment:

- A total of 145 farms were included in the summary.
- Capital Turnover Ratio is 1.48 years.
- Equity in the farm business varied widely from farm to farm, but averaged 38.1 percent for all farms.
- Return on Equity averaged 5.1 percent with significant variation among farms.
- Net Income to Gross Income varied widely, but averaged 10.57 percent.
- Production per cow averaged 5,667 litres of milk sold.

A review of the previous sections showed that only the 100+ Cow Group received a return to all factors of production. When farms were reclassified by various criteria (Net Farm Income, Production and Investment per Cow), the High Net Income per Cow group also received a return greater than all costs.

In compiling the data for this summary, extreme variation among farms was noted. The variation occurred in most factors, including returns, costs and management factors. Below, we list a number of examples of the variation observed.

- Net Farm Income had a range of $1,969. per cow between the highest and lowest net incomes on a per cow basis.
- Investment per cow had a range of $12,734. between the highest and lowest investments on a per cow basis.
- Production per cow varied 6,557 litres per cow between the highest and lowest production on a per cow basis.
- Feed cost per hectolitre of milk sold varied by $16.41 between the highest and lowest farms.
- Feed consumed per cow varied by 4,793 kilograms of feed per cow between the highest and lowest feed users.

With such wide variation in many of the costs, returns and management factors, it is difficult to isolate specific characteristics that result in a profitable dairy unit. It would appear, however, that a number of the key factors of production, such as Production per Cow, Efficient Use of Capital, Efficient Use of Labor and Cost Control are of significant importance in determining the success of the farm unit.

Those farm operators who successfully combined these factors of production in the management and operation of their businesses achieved a reasonable return to their Labor Capital and Management.

TABLE J-1

COST AND PROFIT RATIOS

ITEM		20 - 39 COWS	40 - 49 COWS	50 - 69 COWS	100+ COWS	ALL FARMS
Number of Farms		30	51	27	18	145
Number of Cows per Farm		33	49	72	138	64
COST RATIOS:						
Variable Cost as % of Total Cost		63	65	67	71	67
Fixed Cost as % of Total Cost		22	20	21	17	20
Opportunity Cost as % of Total Cost		15	15	13	12	13
EARNING & SOLVENCY RATIOS:						
Capital Turnover	(Yrs)	1.80	1.59	1.53	1.18	1.48
Farm Equity	(%)	34.1	37.9	35.9	44.6	38.1
Return on Equity	(%)	-0-	1.10	2.73	16.30	5.10
Current Ratio	(%)	6.72	6.92	4.80	6.10	5.76
Net Capital Ratio	($)	1.52	1.61	1.56	1.81	1.62
Debt to Equity Ratio	($)	1.93	1.64	1.79	1.24	1.62
Net Income/Gross Income	(%)	7.11	9.93	8.86	14.87	10.57
MANAGEMENT FACTORS:						
Cows/Man Equivalent	(#)	20	22	22	27	23
Milk Sold/Cow	(L)	5502	5589	5675	5802	5667
Milk Sold/Man Equivalent	(L)	112141	121578	125950	158614	130422
Purchased Feed/Cow	($)	793	785	765	752	770
Purchased Feed/Cow	(kgs)	2807	2807	2721	2598	2720
Feed as % of Milk Sold	(%)	30.0	29.7	28.3	27.6	28.7
Feed as % of Total Costs	(%)	26.3	27.6	25.9	27.4	26.8
Feed/HL Milk Sold	(kgs)	51.00	50.20	47.94	44.78	48.00
Feed Cost/HL Milk Sold	($)	14.41	14.05	13.48	12.97	13.59

Appendix

The Tables in the Appendix outline Per Farm, Per Cow, Per Hectolitre, Per Hundredweight and Percentage figures for all farms combined in the summary.

The Appendix also provides a Glossary of Terms used throughout the Summary. A brief definition of explanation of each term is also provided.

RECEIPTS AND EXPENSES SUMMARY

ITEM	PER FARM	PER COW
RECEIPTS:		
Fluid Milk	$113,638.	$1,849.
Manufactured Milk	43,600.	709.
Milk Subsidy	6,822.	111.
Livestock Sales	14,172.	231.
Crop Sales	2,836.	46.
Miscellaneous Sales	13,977.	227.
TOTAL CASH RECEIPTS	$195,045.	$3,173.
Adj. for Inventory Change	$ 2,622.	$ 43.
TOTAL FARM RECEIPTS	$197,666.	$3,216.
EXPENSES:		
Milk Hauling	$ 5,960.	$ 97.
Dairy Feed	47,481.	772.
Livestock Purchases	4,402.	72.
Vet & Drugs	1,995.	32.
Breeding	2,019.	33.
Dairy Supplies	3,825.	62.
Milk Marketing	9,615.	156.
Crop Expenses	11,132.	181.
Building & Fence Repair	3,650.	59.
Utilities	4,705.	77.
Tractor & Machinery Repair	11,321.	184.
Truck & Auto Expense	3,193.	52.
Interest	16,176.	263.
Hired Labor	15,006.	244.
Taxes	1,289.	21.
Insurance	2,600.	42.
Miscellaneous	11,562.	188.
TOTAL CASH EXPENSES	$155,932.	$2,537.
Building Depreciation	$ 5,705.	$ 93.
Machinery Depreciation	14,323.	233.
TOTAL DEPRECIATION	$ 20,028.	$ 326.
TOTAL FARM EXPENSES	$175,959.	$2,863.
NET FARM INCOME	$ 21,707.	$ 353.

RECEIPTS AND EXPENSES SUMMARY

	PER 100 LITRES	PER CWT.	PERCENTAGE
	$ 32.78	$ 14.44	57.5
	12.58	5.54	22.1
	1.97	0.87	3.5
	4.09	1.80	7.2
	0.82	0.36	1.4
	4.03	1.78	7.1
	$ 56.26	$ 24.78	98.7
	$ 0.76	$ 0.33	1.3
	$ 57.02	$ 25.12	100.0
	$ 1.72	$ 0.76	3.4
	13.70	6.03	27.0
	1.27	0.56	2.5
	0.58	0.25	1.1
	0.58	0.26	1.1
	1.10	0.49	2.2
	2.77	1.22	5.5
	3.21	1.41	6.3
	1.05	0.46	2.1
	1.36	0.60	2.7
	3.27	1.44	6.4
	0.92	0.41	1.8
	4.67	2.06	9.2
	4.33	1.91	8.5
	0.37	0.16	0.7
	0.75	0.33	1.5
	3.34	1.47	6.6
	$ 44.98	$ 19.81	88.6
	$ 1.65	$ 0.72	3.2
	4.13	1.82	8.1
	$ 5.78	$ 2.54	11.4
	$ 50.76	$ 22.36	100.0
	$ 6.26	$ 2.76	-

GLOSSARY OF TERMS

ASSETS - All items of value owned by the farm business.

CAPITAL TURNOVER - The length of time, measured in years, that is required to generate sufficient income to equal total capital invested in the farm business. The ratio is Total Capital Invested divided by Total or Gross Farm Income.

CASH EXPENSES - The sum of all cash expenses expended by the farm business during the year. This includes such items as feed, livestock purchased, hired labor, interest and marketing costs.

DEPRECIATION - This is an amount which represents the loss in value of an asset over a certain period of time due to the number of years of remaining life, the amount of use and obsolescence. In this summary, tax depreciation rates are used.

EQUITY - This is the difference between the value of assets and liabilities and represents the value of assets that would remain if all debts were paid off. Further, it represents the capital contribution to the business by the owner.

FARM RECEIPTS - The sum of all cash receipts received by the business during the year. This includes such items as fluid milk sales, livestock sales and miscellaneous sales.

INTERMEDIATE TERM LIABILITIES - This is a debt owed by the business to others with a usual term of from 1 to 10 years.

INVENTORY ADJUSTMENT - This represents an increase or decrease in the value of inventory (livestock, crops, supplies) held by the farm to earn income.

LABOR AND MANAGEMENT INCOME - This term represents Net Farm Income with an adjustment made for unpaid family labor and interest on equity. It represents a return to the operator for his labor and management skills after all other costs have been deducted.

LIABILITIES - Debts owed by the business to others.

LONG TERM LIABILITIES - Debts of a term greater than 10 years.

MAN EQUIVALENTS - Total number of months of labor including operator, hired and unpaid family labor divided by 12 to reduce the total labor force to the equivalent of the number of men employed on a yearly basis. Further this figure is adjusted against a charge on a per worker basis. The 1983 per worker charge was increased by five (5) percent for 1984.

NET FARM INCOME - Total Farm Income minus Total Farm Expenses. This represents the return to the farm, the operator and family for labor, management and capital.

RETURN TO EQUITY - This represents the return to the owners capital after adjustments have been made for operator labor. The calculation is:

(Net Farm Income - Operator Labor) X 100 Divided by Equity

RETURN TO INVESTED (TOTAL) CAPITAL - This represents the rate of return achieved by the total capital invested in the farm business. The calculation is: (Net Farm Income + Interest Paid - Operator and Family Labor) X 100 Divided by Total Capital Investment (Total Assets)

SHORT TERM LIABILITIES - Debts owed by the business that have a term of less than one (1) year. Short term may also be called Current.